UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,781	01/11/2005	Yoshihiro Urade	2005_0021A	2424
	7590 01/12/200 , LIND & PONACK, I	EXAMINER		
2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			JEAN-LOUIS, SAMIRA JM	
			ART UNIT	PAPER NUMBER
			1617	
			MAIL DATE	DELIVERY MODE
			01/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/520,781	URADE ET AL.	
Examiner	Art Unit	

	SAMIRA JEAN-LOUIS	1617	
The MAILING DATE of this communication appe	ars on the cover sheet with the c	orrespondence add	ress
THE REPLY FILED 16 December 2008 FAILS TO PLACE THIS	APPLICATION IN CONDITION F	OR ALLOWANCE.	
1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Appelor Continued Examination (RCE) in compliance with 37 Coperiods:	replies: (1) an amendment, affidaviteal (with appeal fee) in compliance w	t, or other evidence, w with 37 CFR 41.31; or	hich places the (3) a Request
a) The period for reply expires 5 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or (MONTHS OF THE FINAL REJECTION. See MPEP 706.07(dvisory Action, or (2) the date set forth inter than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE).	g date of the final rejectio FIRST REPLY WAS FIL	n. LED WITHIN TWO
Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	ension and the corresponding amount of hortened statutory period for reply origin	of the fee. The appropria nally set in the final Offic	ate extension fee e action; or (2) as
 The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed wi AMENDMENTS 	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of the	
3. The proposed amendment(s) filed after a final rejection, be a considered and amendment(s) filed after a final rejection, be a considered amendment(s) filed after a final rejection, be a considered and a considered amendment and a cons	nsideration and/or search (see NOT w); er form for appeal by materially rec	E below); ducing or simplifying th	
NOTE: (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.12 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) would be all non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) [how the new or amended claims would be rejected is prov The status of the claim(s) is (or will be) as follows: Claim(s) allowed:	owable if submitted in a separate, t ☐ will not be entered, or b) ☐ will	imely filed amendmer	nt canceling the
Claim(s) objected to: <u>4-7</u> . Claim(s) rejected: <u>3-7 and 10</u> . Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but			
because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessary	a Notice of Appeal, but prior to the vercome <u>all</u> rejections under appea	date of filing a brief, w Il and/or appellant fails	vill <u>not</u> be s to provide a
10. ☐ The affidavit or other evidence is entered. An explanation REQUEST FOR RECONSIDERATION/OTHER	n of the status of the claims after er	ntry is below or attache	ed.
 11. The request for reconsideration has been considered but See continuation Sheet 12. Note the attached Information Disclosure Statement(s). (CONTRIBUTION ANDWARD	ce pecause:
13. ☐ Other: /SREENI PADMANABHAN/ Supervisory Patent Examiner, Art Unit 1617			

Applicant's arguments and Declaration from Dr.Yoshihiro Urade is acknowledged. However, applicant's arguments that the specification provides enablement for the entire genus of prostaglandin D receptor antagonists are not persuasive. It is the Examiner's contention that while applicant has demonstrated suppression of leakage due to brain injury utilizing cetain DP-type and CRTH2 type receptor antagonists, applicant has not demonstrated treatment or inhibition of brain injury utilizing all antagonists for prostaglandin D receptor in a patient in need thereof. Moreover, because of the variability found in the structures of antagonists for prostaglandin D receptor, one of ordinary skill in the art would not predictably concur that all prostaglandin D receptor antagonists can treat brain injury. Given that the skilled artisan must be able to readily recognize what structural features confer the antagonist properties of the prostaglandin D receptors and create another antagonist with the same desired characteristic, such determination would not be able to be ascertained without empirical, undue and unpredictable trial and error experimentation. Consequently, it is the Examiner's contention that applicant is not enabled for all antagonists for prostaglandin D receptor.

Applicant's arguments with regard to the objection of claims 4-7 has been fully considered but is not found persuasive. Because claim 3 remains rejected, such objection is also maintained.

Applicant's arguments that Tsuri et al. refer to allergic edema induced by allergen as opposed to edema in the brain has been fully considered. Applicant further argues that one of ordinary skill would not combine Tsuri and Wong. Such arguments are not persuasive as the rejection was made over the combined references of Tsuri in view of Wong. Tsuri et al. teach (ZS)-7-[(1R,2R,3S,5S)-2-(5-hydroxybenzo[b]tiophen-3-ylcarbonylamino)-10-norpinan-3yl]hept-5-enoic acid via modification of compound 14 using R-group 19 and compound (ZS)-7-[(1R,2R,3S,5S)-2-(5-benzo[b]tiophen-3-ylcarbonylamino)-10-norpinan-3yl]hept-5-enoic acid via modification of compound 14 using R-group 18 as potent selective antagonists of prostaglandin D2 receptors. Tsuri et al. further teach that these compounds are effective in reducing intranasal pressure largely due to their inhibition of vascular permeability (i.e. edema), reduction of smooth muscle cell (found in vascular cells) contractility as well as reducing the number of immune cells (i.e. eosinophils) infiltrates. Consequently, these data suggest that the aforementioned PGD2 receptor antagonists are helpful in reducing inflammation, edema, and vascular permeability. In the specification, applicant defined treatment of brain injury encompasses brain edema, cerebral bleeding (as a result of vascular permeability), and cerebrovascular disorders (see Applicant's specification, pg. 3, lines 15-24).

Wong et al., on the other hand, teach the pathophysiology associated with primary brain injury. Following brain injury, a primary inflammatory response is triggered which increases vascular permeability (i.e. Cerebral bleeding) and vasodilation that leads to vasogenic edema, cerebral ischemia and impaired autoregulation which consequently results in cytotoxic edema that exacerbates the existing cerebral ischemia resulting in secondary brain injury. Thus, in view of applicant's definition of the treatment of brain injury, one of ordinary skill in the art would have found it obvious to try and utilize the compounds of Tsuri et al. given their efficacy in inhibiting increases in microvascular permeability and their efficacy in reducing inflammation due to their effects on eosinophils. Moreover, one of ordinary skill in the art would have found it obvious to utilize the aforementioned compounds in the treatment of brain injury as brain injury is characterized by inflammation, edema formation and vascular permeability. In fact, applicant's arguments that DP receptor antagonists that are effective for brain injury are hard to determine is contradictory to applicant's recitation in claims 3 and 10 since these claims essentially recite the use of all DP receptor antagonists in treating brain injury. In fact, determining that all DP receptor antagonists would in fact entail undue experimentation. As a result, the Examiner asserts that the combined teachings of Tsuri in view of Wong do indeed render obvious applicant's invention.

Thus, the Examiner contends that the rejections of record were indeed proper and are therefore maintained.